PROSEMI

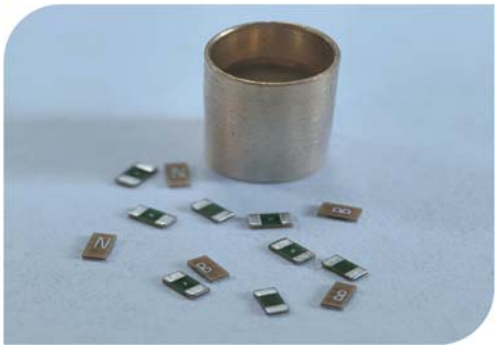
0402FA-L Series

Ultra-Thin Fuse | 0.04x0.02''

Fast Acting series Thin Film Chip Fuse

Features

- Very fast acting at 200% overload current
- Low DCR
- High inrush current withstanding capability
- High reliability
- Fiberglass enforced epoxy fuse body
- Copper termination with nickel and tin plating layer
- Halogen free, RoHS compliance & lead-free



Application

- Panel
- HDD
- Toy
- IoT
- Battery pack
- Finger print
- Smart lock
- Notebook

Electrical Characteristics

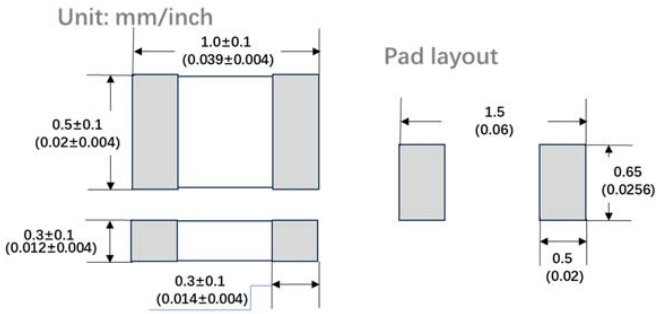
% of Current Rating	Opening Time
100%	4hours min.
200%	5second max.
300%	0.2second max.

Specifications

Part No.	Current Rating(A)	Voltage Rating (Vdc)	Interrupting Rating	Typical Cold DCR (Ω)	Typical I^2t (A^2Sec)*	Marking
0402FA-R500-L	0.5	35	35A @35V	0.165	0.007	=

*Typical I^2t: i.e. melting I^2t at 0.001s of current rating

Dimension

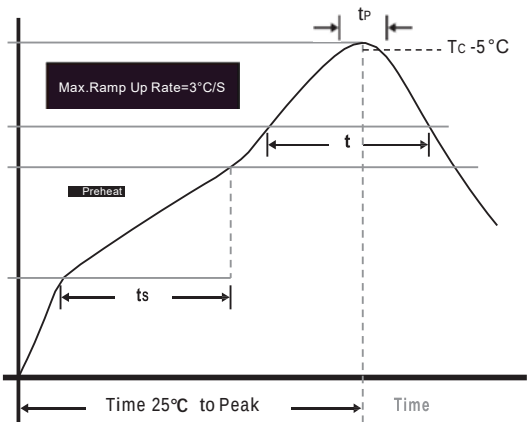


Packaging

- Quantity:10, 000pcs
- 8mm wide tape on 178mm (7 inch) diameter reel -specification EIA Standard 481

© PROSEMI Document No: P0F05202500911001P

Soldering Parameters



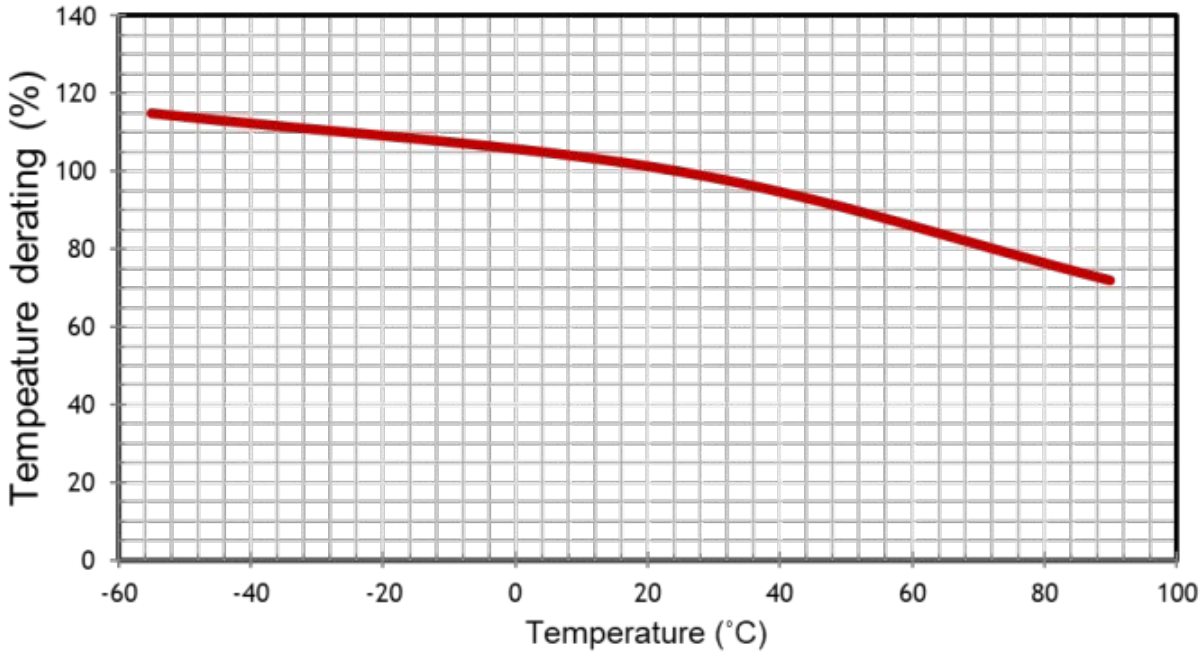
Wave Soldering: 260°C, 10 seconds max.

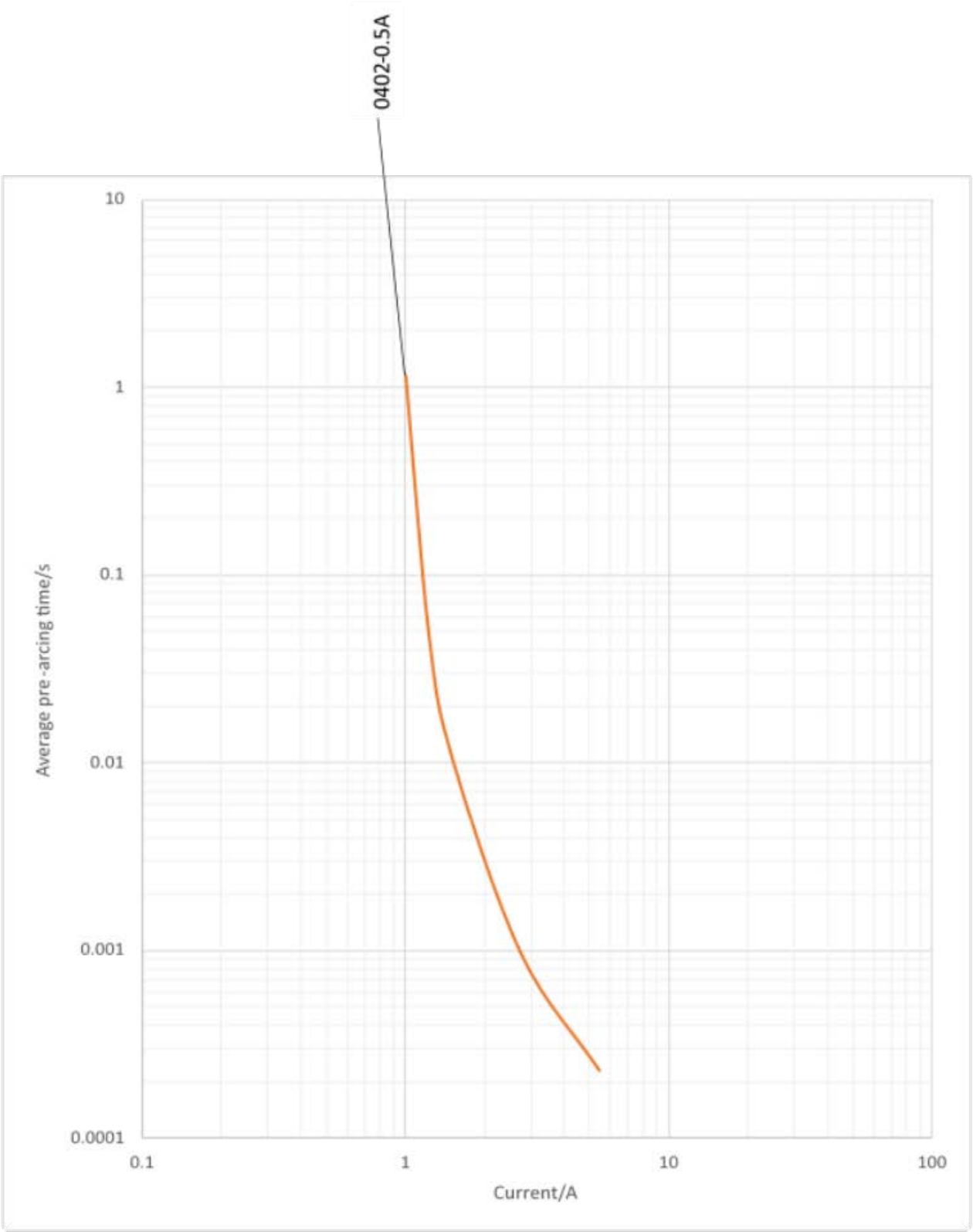
Infrared Reflow: 260°C, 30 seconds max.

IR Reflow Profile

Preheat Heat Temperature min (Tsmin) Temperature max(Tsmax) Time (Tsmin to Tsmax) (ts)	150°C 200°C 60 -120 seconds
Average ramp-up rate (Tsmax to Tp)	3°C/second max.
Liquidous temperature (T_L) Time at liquidous (t_L)	217 °C 60 - 150 seconds
Peak temperature(Tp)	260°C
Time within 5°C of actual peak Temperature (tp)	30 seconds
Average ramp-down rate (Tp to Tsmax)	6°C/second max.
Time 25 °C to peak temperature	8 minutes max.

Temperature Effect on Current Rating



- Normal ambient temperature: 23+/-3℃
- Operating temperature: -55 ~ 105℃

Average Time-Current curve